

**Notice of Allowability**

Application No.

09/665,065

Examiner

Luke Gilligan

Applicant(s)

SHAATH ET AL.

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/3/07.
2. ☒ The allowed claim(s) is/are 1-59.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Caroline Swindell on 12/19/07.

The application has been amended as follows:

Please amend claims 1, 8, and 38 as follows:

Claim 1 (currently amended): A computer-implemented method of managing a file lifecycle, the method comprising the steps of storing data on a storage medium comprising:

associating a set of lifecycle policies with a file in a file system, wherein said lifecycle policies relate to aspects of file classification and file disposition including at least one of: file creation, file retention, file reference, file non-use, file security, file protection, file preservation, file storage locations within a storage medium, cost effective storage of a file, or file expiration;

storing said file on said storage medium accessible by a computer according to said set of

lifecycle policies;

automatically determining from the associated lifecycle policies whenever said file is to be moved;

automatically moving said file according to the associated lifecycle policies to another storage location within said storage medium or within a different storage medium whenever the

associated lifecycle policies determine that said file is to be moved; and

receiving an access request for said file from an application;

providing transparent access to said requested file based on said associated set of lifecycle policies, regardless of where ~~the said~~ file is ~~created~~, located, ~~or moved to~~, and independently of ~~an said~~ application requesting access to said file ~~or a user~~.

Claim 8 (currently amended): A computer-implemented method of managing a file lifecycle, the computer-implemented method comprising the steps of storing data on a storage medium comprising:

providing a virtual storage medium having a plurality of storage media associated therewith, wherein said plurality of storage media are accessible by a file system in a computer, and having associated therewith a set of lifecycle policies relating to at least one of: file storage locations within at least one of said plurality of storage media, file creation, file retention, file reference, file non-use, file security, file protection, file preservation, cost effective storage of a file, ~~and/or~~ file expiration, wherein a file lifecycle comprises aspects of file management including: file classification or file storage disposition;

storing said file on at least one of said plurality of storage media accessible by a computer within said virtual storage medium;

at intervals, determining from the associated lifecycle policies actions dictated by said lifecycle policies for performance on said file;

performing said dictated actions on said file;

receiving an access request for said file from an application; and

providing transparent access to said requested file based on said associated set of lifecycle policies, regardless of where ~~the said~~ file is ~~created~~, located and said dictated actions

performed on said file, or moved to, and independently of an said application requesting access to said file or a user.

Claim 38 (currently amended): A computer-implemented method of managing a file lifecycle, the computer-implemented method comprising the steps of storing data on a storage medium comprising:

providing a virtual storage medium having a plurality of storage media associated therewith, wherein said plurality of storage media are accessible by a file system in a computer, and having associated therewith a set of lifecycle policies relating to file storage locations within at least one of said plurality of storage media, wherein said lifecycle policies relate to at least one of: file creation, file retention, file reference, file non-use, file security, file protection, file preservation, cost effective storage of a file, and/or file expiration, wherein a file lifecycle comprises aspects of file management including: file classification or file storage disposition;

storing said file on at least one of said plurality of storage media within said virtual storage medium accessible by said computer;

upon occurrence of a triggering event, determining from said associated lifecycle policies actions dictated by said lifecycle policies for performance on said file;

performing said dictated actions on said file;

receiving an access request for said file from an application; and

providing transparent access to said requested file based on said associated set of lifecycle policies, regardless of where the said file is created, located and said dictated actions performed on said file, or moved to, and independently of an said application requesting access to said file or a user.

***Allowable Subject Matter***

3. Claims 1-59 are allowed. The following is an examiner's statement of reasons for allowance: The primary reason for the allowance of claims 1-7, 14-37, and 47-59 is the inclusion of the limitations in all of the claims that is not found in the prior art references of associating a set of lifecycle policies with a file in a file system, automatically moving the file from one storage location to another storage location whenever it is determined, based on the associated lifecycle policies, that the file is to be moved, and in response to receiving a access request for the file from an application, providing transparent access to the requested file based on the lifecycle policies regardless of the file's location and independently of the application requesting access to the file. The closest prior art (Szalwinski and Gable) teach utilizing file system policies to determine when a file is to be moved from one location to another (Szalwinski) as well as managing various stages of a file's lifecycle from creation through final disposition (Gable) including providing access to files throughout their lifecycle's (Gable). However, non of the prior art teaches the particular manner of utilizing associated lifecycle policies to determine when a file is to be moved and subsequently provide transparent access to the moved file that is independent of storage location and a requesting application. For example, Gable utilizes the requesting record management software to locate and provide access to a moved file and, therefore, the access is not independent of storage location and the requesting application.

4. The primary reason for the allowance of claims 8-13 and 38-46 is the inclusion of the limitations in all of the claims that is not found in the prior art references of associating a set of lifecycle policies with a file in a file system, performing dictated actions on the file from whenever it is determined, based on the associated lifecycle policies, that the dictated actions

are to be performed, and in response to receiving a access request for the file from an application, providing transparent access to the requested file based on the lifecycle policies regardless of the dictated actions performed on the file and independently of the application requesting access to the file. The closest prior art (Szalwinski and Gable) teach utilizing file system policies to determine when a file is to be moved from one location to another (Szalwinski) as well as managing various stages of a file's lifecycle from creation through final disposition (Gable) including providing access to files throughout their lifecycle's (Gable). However, non of the prior art teaches the particular manner of utilizing associated lifecycle policies to determine dictated actions to be performed on a file and subsequently provide transparent access to the file that is independent of the dictated actions and a requesting application. For example, Gable utilizes the requesting record management software to locate and provide access to a file and, therefore, the access is not independent of the requesting application.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luke Gilligan whose telephone number is (571) 272-6770. The examiner can normally be reached on Monday-Friday 8am-5:30pm.7.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/21/07

  
C. LUKE GILLIGAN  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 3600